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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,625	04/17/2001	Kenichiro Sakai	121.1012	7047

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EXAMINER

FRANKLIN, JAMARA ALZAIDA

ART UNIT	PAPER NUMBER
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2876

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/835,625

Applicant(s)

SAKAI ET AL.

Examiner

Jamara A. Franklin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,9-11,14,15 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 7, 8, 12, 13, 16, and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 24, 2007 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 5, 6, 9-11, 14, 15, and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakajima et al. (US 6,325,287) (hereinafter referred to as 'Nakajima').

Nakajima teaches a two-dimensional code extraction method, a computer-readable medium storing a program which, when executed by a computer, causes the computer to execute a two-dimensional code extraction method, and an apparatus extracting two-dimensional code from an input document comprising:

inputting image data (col. 8, lines 43-45);

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scanning said input image data in a square block unit of $M \times N$ pixels (M and N are positive integers) (see figures 9-11);

detecting blocks that satisfy specific conditions from said scanned blocks (col. 8, line 63-col. 9, line 7);

detecting a plurality of regions of blocks corresponding to a respective plurality of two-dimensional codes, each region of blocks comprising a number of neighboring and contiguous blocks from among said detected blocks that satisfy specific conditions from said scanned blocks (col. 9, lines 8-63);

detecting one or more regions of two-dimensional codes, each region of a two-dimensional code containing a corresponding detected region of blocks comprising a predetermined number of the neighboring and contiguous blocks as a two-dimensional code (col. 9, lines 61-63); and

extracting one or more two dimensional codes from among the detected one or more regions of two-dimensional code regions that have more than a predetermined number of the neighboring and contiguous blocks (col. 9, line 61-col. 10, line 10);

the two-dimensional code extraction method and computer-readable medium further comprising:

detecting a two-dimensional code region comprising a maximum number of detected neighboring and contiguous blocks from among the detected two-dimensional code regions (col. 9, lines 61-63);

the two-dimensional code extraction method and computer-readable medium wherein the detecting the two-dimensional code regions further comprises:

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scanning a detected block region from a point within said block region block by block having a predetermined size upward, downward, to the right and to the left of said point;

detecting a position such that a number of black pixels with said scanned block is less than a predetermined value; and

extracting a square area including said detected position as a region of a two-dimensional code that contains a region of blocks, for each of the plurality of detected regions of blocks; and

the two-dimensional code extraction method and computer-readable medium further comprising:

detecting a two-dimensional code region comprising a maximum number of detected contiguous blocks from among the detected two-dimensional code regions (col. 9, lines 61-63).

Allowable Subject Matter

4. Claims 3, 4, 7, 8, 12, 13, 16, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 3 and 12, the prior art of record fails to teach, or fairly suggest either alone or in combination thereof, a block that included a ratio between transition points of pixels within horizontal or vertical lines of block and a total number of pixels of the block that falls within a specific range is detected as a block satisfying said specific conditions. Furthermore, no

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motivation has been found to combine a reference teaching the aforementioned element to arrive at the claimed invention;

Regarding claims 4 and 13, the prior art of record fails to teach, or fairly suggest either alone or in combination thereof, a block in which variation of a vertical or horizontal projection of black pixels included in each line in the block falls within a specific range is detected as a block satisfying said specific conditions. Furthermore, no motivation has been found to combine a reference teaching the aforementioned element to arrive at the claimed invention;

Regarding claims 7 and 16, the prior art of record fails to teach, or fairly suggest either alone or in combination thereof, the method of calculating average distance between pairs of black pixels within the scanned blocks and extracting a scanned block as a detected block satisfying the specific conditions, when a determination is made that the calculated average distance exceeds a predetermined value. Furthermore, no motivation has been found to combine a reference teaching the aforementioned element to arrive at the claimed invention; and

Regarding claims 8 and 17, the prior art of record fails to teach, or fairly suggest either alone or in combination thereof, the method of determining an angle of inclination of a detected region of two-dimensional code; and correcting the angle of inclination, if the angle of inclination exceeds a specific value. Furthermore, no motivation has been found to combine a reference teaching the aforementioned element to arrive at the claimed invention.

Response to Arguments

6. The examiner contends that the rejection of claims 1, 2, 5, 6, 9-11, 14, 15, and 18-20 remains since whether it is described as 'block regions' or 'regions of blocks' the Nakajima

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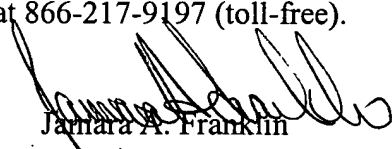
invention teaches a region or regions of blocks of one or a plurality of two-dimensional codes comprising a predetermined number of neighboring and contiguous blocks. Therefore the rejections of claims 1, 2, 5, 6, 9-11, 14, 15, and 18-20 remain.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamara A. Franklin whose telephone number is (571) 272-2389. The examiner can normally be reached on Monday through Friday 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jamara A. Franklin
Examiner
Art Unit 2876

JAF
March 07, 2007